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APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/977,894	10/15/2001		Cheol-Woong Lee	205,329	3469	
826	7590	04/29/2005		EXAMINER		
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CHARLOTT		•		2135		

DATE MAILED: 04/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

·	Application No.	Applicant(s)					
•	09/977,894	LEE ET AL.					
Office Action Summary	Examiner	Art Unit					
	Niray Patel	2135	.				
The MAILING DATE of this communi							
Period for Reply							
A SHORTENED STATUTORY PERIOD FOR THE MAILING DATE OF THIS COMMUNI  - Extensions of time may be available under the provisions after SIX (6) MONTHS from the mailing date of this commendate. If the period for reply specified above is less than thirty (30). If NO period for reply is specified above, the maximum state. Failure to reply within the set or extended period for reply Any reply received by the Office later than three months a earned patent term adjustment. See 37 CFR 1.704(b).	CATION. of 37 CFR 1.136(a). In no event, however, may unication. )) days, a reply within the statutory minimum of t tutory period will apply and will expire SIX (6) M will, by statute, cause the application to become	a reply be timely filed  hirty (30) days will be considered timely.  DNTHS from the mailing date of this communication.  ABANDONED (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) file	d on <u>10/15/2001</u> .						
	2b)⊠ This action is non-final.						
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims	·						
4) ⊠ Claim(s) <u>1-22</u> is/are pending in the a 4a) Of the above claim(s) is/are 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) <u>1-22</u> is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restrict	re withdrawn from consideration.		·				
Application Papers							
9) The specification is objected to by the 10) The drawing(s) filed on 15 October 2  Applicant may not request that any object Replacement drawing sheet(s) including 11) The oath or declaration is objected to	$001$ is/are: a) $\square$ accepted or b) $\boxtimes$ ction to the drawing(s) be held in abey the correction is required if the drawi	rance. See 37 CFR 1.85(a). ng(s) is objected to. See 37 CFR 1.121(d).					
Priority under 35 U.S.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-1449 or Paper No(s)/Mail Date	TO-948) Paper N	w Summary (PTO-413) lo(s)/Mail Date of Informal Patent Application (PTO-152)					

U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04)

HL

#### DETAILED ACTION

1. Claims 1-22 have been submitted for examination.

2. Claims 1-22 have been examined and rejected.

### Drawings

3. Fig.1 is objected because it is covered by stamp (Statement of Filing by Express mail).

Appropriate correction is required.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

 Claims 1-4, 7,8,10,13, 15,16,18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abdelnur et al. (U. S. Patent No. 6,212,640) and in view of Stebbings, (U. S. Patent No. 6,564,253).

As per claim 1, Abdelnur discloses:

A system for sharing [col.1 lines 7-9 "computer systems, and more specifically to an information sharing environment in a computer network"] digital literary works

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[col.2 line 6 i.e., digital data] through a communication network [col.8 lines 32-33 i.e., internet], comprising:

a data communication network [col.8 lines 32-33 i.e., internet];

a list providing server for providing list information of a Sharing Web [col.3 lines 4-5 "information servers maintain resources that may be shared through the Internet"];

at least one agent server for forming the Sharing Web between users through the data communication network [col.10 lines 38-39 Fig.4, "successfully establish communication link 445 with web server 480 and can access its resources"];

at least one user terminal for transmitting and receiving a digital literary work through the Sharing Web [Fig. 4, client 430 communicating bidirectional];

a main server [Fig. 4, web server 480] for accessing a Sharing Web listed in the list information provided from the list providing server through the data communication network, [col.11 lines 12-13, "Web server 480 is a gateway on network 450 that can indirectly route application 410's requests to server 460", col.1 lines 26-28] searching for the digital literary work shared through the Sharing Web according to a predetermined search condition [col.11 lines 23-27 "access a resource server that can satisfy application 410's request"], determining [col.2 lines 36-37 "server evaluates certain information"], deciding a digital literary work to be shared among the digital literary works, which are inputted by a supervisor [col.2 lines 36-37 "server evaluates certain information, such as identity; col. 5 lines 45-47 Fig. 1, applications downloaded from a server are trusted by that server. Thus, client application 101 can access the resources available on office server 102"], according to the determination result and literary work

information requiring the protection, inputted by the supervisor [col.9 lines 60-63, "Authentication involves submission of data (i.e., user names, passwords, etc.) from a client application to a server, verification of this information by the server, and establishment of a successful connection], and generating accessing information of the Sharing Web [col. 6 lines 16-17 "The NFS system generated mount table is stored as a file on each server", Fig.2, NFS server 260];

at least one *sub-server* [*col.10 lines 41-43* "other servers"] for receiving information of the digital literary work decided to be shared and *the accessing information* of the Sharing Web *from the main server*, connected to the agent server depending on the accessing information [*col. 11 lines 16-18*, Fig.4, "web server 480 and resource server 460 are both members of network 450, the two servers can communicate free from any limitations"], and allowing a sharing of the digital literary work decided to be shared [*col. 11 lines 16-18*, Fig.4 the two servers can communicate free from any limitations];

a premise communication network for connecting the main server and the sub-server to each other [col.11 lines 16- 18, Fig.4, (RPC-UDP) "web server 480 and resource server 460 are both members of network 450, the two servers can communicate free from any limitations"];

and a network interface unit for connecting the premise communication network to the data communication network ["firewall" Fig.1]

Abdelnur does not disclose that protecting against an illegal reproduction through a communication network and a digital literary work has an identifier.

However, Stebbings discloses that protecting against an illegal reproduction through a communication network [col.1 lines 13-15 "preventing unauthorized use or distribution of proprietary data on or via the Internet"] and a digital literary work has an identifier [col.8 lines 44-46, 52-60 "authorization usage file header"].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teaching of Stebbings into the teaching of Abdelnur to add identifier in a digital work to prevent an illegal reproduction through a communication network. The modification would be obvious because one of ordinary skill in the art would be motivated to have internet or content authorization flag for the purpose of preventing unauthorized use or distribution of proprietary data on or via Internet or other networked configuration [Stebbings *col.1 lines 12-15*].

As per claim 2, the rejection of claim 1 is incorporated and further Abdelnur discloses:

the sub-server reads a corresponding digital literary work from the main server [col.11 lines 16-18, Fig. 4, "web server 480 and resource server 460 are both members of network 450, the two servers can communicate free from any limitations"] whenever receiving a file transmission request for the shared digital literary work from the user terminal connected to the sub-server via the Sharing Web, and transmits said read digital literary work to the user terminal [col.10 lines 64-66 and Fig.4 - Fig.5 "application 410's request is processed by server 460, at step 535, client application 410 receives a response from server 460, via communication link 440"].

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As per claim 3, the rejection of claim 1 is incorporated and further Abdelnur discloses:

the *sub-server pre-reads* the digital literary work decided to be shared *from the main server* and stores it [col.11 lines 16-18, Fig. 4 "web server 480 and resource server 460 are both members of network 450, the two servers can communicate free from any limitations"], and *transmits* the stored digital literary work to the user terminal when receiving a file *transmission request from the user* terminal connected to the sub-server via the Sharing Web. [col.10 lines 64-66 and Fig.4 - Fig.5 "application 410's request is processed by server 460, at step 535, client application 410 receives a response from server 460, via communication link 440"].

As per claim 4, the rejection of claim 1 is incorporated and Abdelnur doesn't explicitly disclose that the digital literary work having the identifier is an advertising digital literary work formally produced and *distributed for publicity* by a writer, a production and distribution company of the literary work, or a server managing company.

However, Stebbings discloses wherein the digital literary work having the identifier is an advertising digital literary work formally produced and *distributed for publicity* by a writer, a production and distribution company of the literary work, or a server managing company. [col.1 line 32-35 "distribute their works such as products and/or services, in electronic form. Copyright owners include entertainment and education service providers"].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teaching of Stebbings into the teaching of

Abdelnur so that the digital literary work having the identifier is an advertising digital literary work formally produced and distributed for publicity by a writer, a production and distribution company of the literary work, or a server managing company. The modification would be obvious because one of ordinary skill in the art would want to distribute their works such as products and/or services, in electronic form [Stebbings, *col.1 line 32-35*].

### As per claim 7, Abdelnur discloses:

A method of sharing [col.1 lines 7-9 "computer systems, and more specifically to an information sharing environment in a computer network"] digital literary works [col. 2 line 6 i.e., digital data,] through a communication network [col.8 lines 32-33 i.e., internet], comprising the steps of:

- a) inputting and storing literary work information requiring the protection of its copyright and a digital literary work in a main server by a supervisor [col.2 lines 30-32 "web pages that are stored on a remote server. Information including data files, and the web pages are often shared and transferred between the client and the server"]:
- b) connecting said main server to an agent server mediating a Sharing Web by the main server, and searching for a digital literary work shared through the Sharing Web according to a search condition set by the supervisor [col.11 lines 23-27 "Requests submitted by application 410 to web server 480 are processed by servlet 490.Servlet 490 is a program code that can be written in the Java programming language, or other programming languages, and can access a resource server that can satisfy application 410's request"];

- c) downloading the searched digital literary work from the Sharing Web to the main server, determining in the digital literary work [col.10 lines 59-60 Fig.5 "At step 520, it is determined whether application 410 is a trusted application to server 460"], and deciding the digital literary work to be "pass" or "fail" with respect to its shareability according to the determination result by the main server [col.2 lines 36-37 "server evaluates certain information, such as identity"];
- d) generating and storing information of a digital literary work to be shared by the main server against the digital literary work decided to be "fail" as to its shareability among the digital literary works, [col.6 line 16-17 "The NFS system generated mount table is stored as a file on each server and client in the NFS network. The mount table consist of a list of entries"] according to the literary work information requiring the protection of its copyright [col.2 lines 36-37 "server evaluates certain information, such as identity];
- e) accessing the Sharing Web, sharing a list of the digital literary work to be shared, [col.6 lines 33-34, "to access information stored on remote file system 270, accessible via NFS server 260"] and transmitting the list to the user when a transmission request for the digital literary work to be shared from a predetermined Sharing Web user is received [col.10 lines 64-66 and Fig.4 Fig.5 "application 410's request is processed by server 460, at step 535, client application 410 receives a response from server 460, via communication link 440"].

Abdelnur does not disclose that protecting against an illegal reproduction through a communication network and a digital literary work has an identifier.

However, Stebbings discloses that protecting against an illegal reproduction through a communication network [col.1 lines 13-15 "preventing unauthorized use or distribution of proprietary data on or via the Internet"] and a digital literary work has an identifier [col.8 lines 44-46, 52-60 "authorization usage file header"].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teaching of Stebbings into the teaching of Abdelnur to add identifier in a digital work to prevent an illegal reproduction through a communication network. The modification would be obvious because one of ordinary skill in the art would want use internet or content authorization flag for the purpose of preventing unauthorized use or distribution of proprietary data on or via Internet or other networked configuration [Stebbings col.1 lines 12-15].

As per claim 8, the rejection of claim 7 is incorporated and further Abdelnur discloses:

if there is no search result value corresponding to the search condition, all the digital literary works corresponding to the literary work requiring the protection of its copyright inputted by the supervisor are determined to be shared. [col.2 lines 30-33 "web pages" that are stored on a remote server. Information including data files, and the web pages are often shared and transferred between the client and the server"].

As per claim 10, the rejection of claim 7 is incorporated and further it is a method claim corresponds to system claim 4 and is rejected for the same reason set forth in the rejection of claim 4 above.

As per claim 13, the rejection of claim 7 is incorporated and further Abdelnur discloses:

inserted into the digital literary work by a server managing company. [col.7 lines 2-3 "A file handle is created by the NFS server", col.6 lines 66-67 "A file handle is the token by which NFS clients refer to files on an NFS server"].

As per claim 15, Abdelnur discloses:

A method of sharing [col.1 lines 7-9 "computer systems, and more specifically to an information sharing environment in a computer network"] digital literary works [col. 2 line 6 i.e., digital data,] through a communication network [col.8 lines 32-33 i.e., internet], comprising the steps of:

- a) inputting and storing literary work information requiring the protection of its copyright and a digital literary work in a main server by a supervisor [col.2 lines 30-32 "web pages that are stored on a remote server. Information including data files, and the web pages are often shared and transferred between the client and the server"];
- b) connecting said main server to an agent server mediating a Sharing Web by the main server, and searching for a digital literary work shared through the Sharing Web according to a search condition set by the supervisor [col.11 lines 23-27 "Requests

submitted by application 410 to web server 480 are processed by servlet 490. Servlet 490 is a program code that can be written in the Java programming language, or other programming languages, and can access a resource server that can satisfy application 410's request"];

- c) downloading the searched digital literary work from the Sharing Web to the main server, determining in the digital literary work [col.10 lines 59-60 Fig.5 "At step 520, it is determined whether application 410 is a trusted application to server 460"], and deciding the digital literary work to be "pass" or "fail" with respect to its shareability according to the determination result by the main server [col.2 lines 36-37 "server evaluates certain information, such as identity"];
- d) generating and storing information of a digital literary work to be shared by the main server against the digital literary work decided to be "fail" as to its shareability among the digital literary works, [col.6 line 16-17 "The NFS system generated mount table is stored as a file on each server and client in the NFS network. The mount table consist of a list of entries"] according to the literary work information requiring the protection of its copyright [col.2 lines 36-37 "server evaluates certain information, such as identity];
- e) generating and storing accessing information of the Sharing Web, and determining a division of system resources required to share the digital literary work to be shared by the main server [col.10 lines 41-46 "In addition to resources available on web server 480, application 410 may also need to access resources available on other servers on network 450, such as server 460. To access those resources (i.e., resource 470) application 410 needs to submit a request to the server that is linked to those

resources", Fig.4, web server 480 and server 460 communicate to access resources 470];

- f) transmitting a sharing execution command from the main server to a subserver in response to the division information of system resources [Fig.4, web server 480 and server 460 communicate to access resources 470];
- g) connecting the sub-server to the main server, receiving the accessing information of Sharing Web to be accessed and information of the digital literary work to be shared according to the *sharing execution command* from the main server, accessing the Sharing Web by the accessing information, and allowing a sharing of the digital literary work to be shared [ *col.7 lines 47-49 ,52-54* "The WebNFS program is executed on NFS server 360 to respond to the RPC requests submitted by NFS client 330. When an NFS request is made, NFS server 360 finds the file for which the request was made" "NFS server 360 returns a file handle to NFS client 330 through communication link 340, so that the client can access file system 370"].

Abdelnur does not disclose that protecting against an illegal reproduction through a communication network and a digital literary work has an identifier.

However, Stebbings discloses that protecting against an illegal reproduction through a communication network [col.1 lines 13-15 "preventing unauthorized use or distribution of proprietary data on or via the Internet"] and a digital literary work has an identifier [col.8 lines 44-46, 52-60 "authorization usage file header"].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teaching of Stebbings into the teaching of

Abdelnur to add identifier in a digital work to prevent an illegal reproduction through a communication network. The modification would be obvious because one of ordinary skill in the art would want use internet or content authorization flag for the purpose of preventing unauthorized use or distribution of proprietary data on or via Internet or other networked configuration [Stebbings *col.1 lines 12-15*].

As per claim 16, the rejection of claim 15 is incorporated and is rejected for the same reason set forth in the rejection of claim 8 above.

As per claim 18, the rejection of claim 15 is incorporated and further claim 18 is a method claim corresponds to system claim 4 and is rejected for the same reason set forth in the rejection of claim 4 above.

As per claim 21, the rejection of claim 15 is incorporated and is rejected for the same reason set forth in the rejection of claim 13 above.

5. Claims 5,11 and 19 are rejected under 35 USC 103 (a) for being unpatentable over Abdelnur et al. in view of Stebbings, and further in view of Wiser et al. (U.S. Patent No. 6,385,596).

As per claims 5, the rejection of claim 1 is incorporated and further Stebbings discloses:

the digital literary work has an identifier [col. 8 lines 44-46, 52-60 "authorization usage file header"].

Abdelnur and Stebbings don't explicitly disclose a digital literary work edited with a reduction in its quality to a level lower than that of an original digital literary work.

However, Wiser discloses that a digital literary work edited [col.12 lines 5-7 "uses the authoring tool to perform any desired digital signal processing, and editing on the digitally recorded audio data"].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teaching of Wiser into the teaching of Abdelnur et al. and Stebbings to a digital literary work edited with a reduction in its quality to a level lower than that of an original digital literary work. The modification would be obvious because one of ordinary skill in the art would want to distribute media data files from their respective authors [Wiser, *col. 11 lines 63-64*]. In doing so one would be able to look preview of digital work prior to purchase or use for advertising purpose and prevent from illegal reproduction of digital work.

As per claim 11, the rejection of claim 7 is incorporated and further claim 11 is a method claim corresponds to system claim 5 and is rejected for the same reason set forth in the rejection of claim 5 above.

As per claim 19, the rejection of claim 15 is incorporated and further claim 19 is a method claim corresponds to system claim 5 and is rejected for the same reason set forth in the rejection of claim 5 above.

6. Claims 6, 12 and 20 are rejected under 35 USC 103 (a) for being unpatentable over Abdelnur et al. in view of Stebbings, and further in view of Moskowitz (U.S. Patent No. 6,598,162).

As per claim 6, the rejection of claim 1 is incorporated and further Stebbings discloses:

the digital literary work has an identifier [col. 8 lines 44- 46, 52-60 "authorization usage file header"]

Abdelnur and Stebbings don't explicitly disclose the digital literary work encrypted with a predetermined encryption key.

However, Moskowitz discloses that the digital literary work having the identifier is a digital literary work encrypted with a predetermined encryption key [col.6 lines 22-25 FIG.1, "according to an embodiment of the present invention some of the header information can be identified and "scrambled" using the predetermined key at steps 110 to 130"].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teaching of Moskowitz into the teaching of Abdelnur et al. and Stebbings to have encrypted with a predetermined encryption key. The modification would be obvious because one of ordinary skill in the art would want to be increased security is achieved in the method by combining elements of "public-key steganography" with cryptographic protocols, which keep in-transit data secure by scrambling the data with "keys" in a manner that is not apparent to those with access to the content to be distributed [Moskowitz col.5 lines 23-27].

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As per claim 12, the rejection of claim 7 is incorporated and further claim 12 is a method claim corresponds to system claim 6 and is rejected for the same reason set forth in the rejection of claim 6 above.

As per claim 20, the rejection of claim 15 is incorporated and further claim 20 is a method claim corresponds to system claim 6 and is rejected for the same reason set forth in the rejection of claim 6 above.

7. Claim 9 and 17 are rejected under 35 USC 103 (a) for being unpatentable over Abdelnur et al. in view of Stebbings, and further in view of Halabieh (U.S. Patent No. 6,564,170).

As per claim 9, the rejection of claim 7 is incorporated and further Stebbings discloses:

the digital literary work has an identifier [col.8 lines 44-46, 52-60 "authorization usage file header"].

Abdelnur and Stebbings don't explicitly disclose calculating a dilution ratio of the number of digital literary works decided to be "pass" as to its shareability to the total number of searched digital literary works.

Halabieh discloses calculating a dilution ratio of the number of digital literary works decided to be "pass" as to its shareability to the total number of searched digital literary works [col.3 lines 35-45 "Using the number of each triggered event and the total of all events, the system calculates the first degree probability for each event in step 202" Fig.2 components 200,201A, 201B, 202].

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Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teaching of Halabieh into the teaching of Abdelnur and Stebbings to calculate a ratio. The modification would be obvious because one of ordinary skill in the art would want to monitor the user activities.

As per claim 17, the rejection of claim 15 is incorporated and is rejected for the same reason set forth in the rejection of claim 9 above.

8. Claim 14 and 22 are rejected under 35 USC 103 (a) for being unpatentable over Abdelnur et al. in view of Stebbings, and further in view of Natarajan (U.S. Patent No. 6,611,599).

As per claim 14, the rejection of claim 7 is incorporated and further Stebbings discloses:

the digital literary work has an identifier [col.8 lines 44-46, 52-60 "authorization usage file header"]

Abdelnur and Stebbings don't explicitly disclose the identifier is a watermark.

Natarajan discloses the identifier is a *watermark* [col.2 lines 29-20 The present invention provides a technique for identifying digital object using a digital watermark col.2 lines 29-30]

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teaching of Natarajan into the teaching of Abdelnur et al. and Stebbings to have the identifier is a watermark. The modification would be

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obvious because one of ordinary skill in the art would be motivated to identify digital object using a digital watermark [Natarajan *col.2 lines 29-30*].

As per claim 22, the rejection of claim 15 is incorporated and is rejected for the same reason set forth in the rejection of claim 14 above.

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### Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nirav Patel whose telephone number is 571-272-5936. The examiner can normally be reached on 8 am - 4:30 pm (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nirav Patel. 4/21/05

SUPERVISORY PATENT FY?

KIM VU

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